SOUTHERN RHODESIA.

REPORT

OF THE

Director of Agriculture

FOR THE YEAR 1924.

Presented to the Legislative Assembly,
1925.

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I have the honour to present a report on agriculture in Southern Rhodesia for the year 1924.

Conditions in 1924.—Climatic conditions were on the whole unfavourable from an agricultural point of view throughout the rainfall season from October, 1923, to April, 1924. The total mean rainfall for that period was only 16.7 inches, or 11.3 inches under normal, whilst its incidence was very unsatisfactory. Very little rain fell before December. These conditions, although apparently favourable to cotton and tobacco, had the effect of reducing the yield of all other crops below that of the previous season.

The abnormally low rainfall was naturally followed by shortage of winter grazing and of water in certain districts, resulting in some cases in losses of stock, varying in proportion to the local severity of the drought and the type of vegetation. This situation, however, was fortunately relieved by the advent of early rains in October, which up to the end of the year were heavy and continuous. The total mean fall of 16.79 inches for the period October to December, 1924, has only once been exceeded, *i.e.*, in the year 1917.

The circulation of loan money for permanent works, the satisfactory prices obtained for cotton, tobacco and the better types of cattle all had a good effect upon the financial situation.

The final approval, in September, by the Legislative Assembly of the Agreement with the Imperial Cold Storage and Supply Company, Limited, gave an added potential value to all cattle in Southern Rhodesia and an immediate stimulus to the cattle industry. The accompanying schedule of progressive figures gives some idea of the development which has taken place in the Colony during the past ten years.

Locusts.—The invasion of locusts from the Bechuanaland Protectorate, with the advent of early rains, resulted in a heavy infestation of hoppers throughout the greater part of the eastern and southern districts

of Southern Rhodesia, and involved the Colony in an extensive and costly campaign against them. In certain districts some damage to crops was sustained, but on the whole the methods employed proved satisfactory.

Markets.—So far as tobacco is concerned, the investigations made by Mr. Taylor, the Tobacco and Cotton Expert, whilst in England this year, proved conclusively that our tobacco can be readily disposed of there at satisfactory prices, and that it is not so much a question of finding a market as of growing sufficient quantities of suitable leaf to fulfil the demand which already exists, and guaranteeing that the supply will be maintained.

The crop of cotton grown last year found a ready market in England at a very good price, and no difficulty is anticipated in disposing of the coming season's crop.

Regarding the sale of oranges, it has been definitely ascertained from the Citrus Adviser, who spent some months in England on behalf jointly of the Fruit Growers' Exchange and this Government, that Rhodesian oranges compare very favourably with the product of other countries and are available for sale at a time when the supply is lowest, and that as a result of these two factors payable prices are assured.

The first consignment of eggs for sale on the English market was despatched by the Rhodesian Egg Circle in December, with satisfactory results, and this market will be catered for to an increasing extent as time goes on. Already the bulk of the eggs imported by the Belgian Congo come from this Colony.

Dairy produce has been disposed of in South Africa without the necessity for export overseas.

The most important need for an outlet has of late been for cattle, and the solution of the problem by the Agreement entered into with the Imperial Cold Storage and Supply Company, Limited, will have wide-reaching benefits. Contracts entered into by the company for the supply of beef to Italy and elsewhere will enable it to purchase large numbers of cattle, and to absorb a class of stock for which of late there has been practically no outlet. This must necessarily benefit the farmer mainly dependent on cattle.

Cattle Industry.—Cold Storage Agreement.—The Agreement with the Imperial Cold Storage and Supply Company, Limited, entered into during the year by the Government, and the prospect of the early provision of storing facilities, permitting of an export trade, has naturally completely changed the outlook so far as the cattle industry is concerned. Under this Agreement the Imperial Cold Storage Company has agreed to proceed without delay with the erection of refrigerating works capable of dealing with 20,000 head of cattle per annum. These works will be extended as required.

Cattle Embargo.—In terms of the Customs Agreement entered into with the Union Government and ratified by the Legislative Assembly in November last, an embargo has been placed on all slaughter oxen weighing less than 1,050 lbs. at point of departure to the Union. This affects all but the better class cattle, but an incentive still exists for the stall feeding of oxen for the Johannesburg market, for which our improved herds have shown themselves extremely suitable.

Export Subsidy.—The subsidy provided by this Government in connection with beef or live cattle exported from Southern Rhodesia has been taken advantage of by the Rand Cold Storage, shipping through

their Durban branch, and it is expected that practically the whole of the amount of £15,000 placed on this year's Estimates for the purpose will be applied for.

The total exports of cattle for the past year amounted to 50,770, compared with 34,841 last year, these having been despatched to the following destinations :—

Union of South Africa	46,407
Northern Rhodesia	541
Belgian Congo	3,404
Portuguese East Africa	418
	50,770

Importations.—Importations amounted to 666 and were all breeding stock from the Union of South Africa, the figure being slightly higher than that for importations last year. There appears to be a tendency to make use of pure-bred bulls produced in the Colony to an increasing extent, and the demand for these is good and prices comparatively satisfactory.

Dairying.—The production of dairy produce in 1924 exceeded that of previous years to a very satisfactory degree, the following being the comparative figures :—

	1923.	1924.	Percentage of increase.
Creamery butter (lbs.)	554,206	871,714	57.3
Cheese (lbs.)	107,470	130,000	21.5
Butter export (lbs.)	342,759	589,985	72.1
Value of butter export	£28,838	£50,048	73.5

Good markets for butter were available in the Union of South Africa, in the Congo and in Portuguese territories, and there was no necessity to export overseas. The creameries made good profits, and are anticipating greater support for the coming season.

Encouraged by the success of existing cheese factories, others are being opened, and this branch of the dairy industry is extremely satisfactory.

An improvement has been noticeable in the supply of fresh milk to the larger centres, which was ample even in the driest months of the year.

The Dairy Expert reports a very gratifying increase in the interest taken in dairying, particularly in the direction of obtaining better class bulls and in the treatment of dairy herds. Importations from the Union include a large proportion of Friesland animals. It is worthy of note that in 1923 there were no less than 1,003 pure-bred females of the Friesland breed, as against 360 pure-bred females of all the other dairy breeds combined.

The scheme inaugurated in 1922 for taking milk records is progressing well, and the number of cows recorded stands at 124, as against 25 in 1922. The scheme has already proved that the 1,000-gallon cow can be raised in the Colony as well as in any country of the world, if good treatment and food are provided, but much remains to be done to raise the average milk production to a creditable standard.

Sheep.—Sheep breeding on a small scale is being carried on in various districts. The crossing of Persian rams with native and improved sheep for the production of mutton is giving satisfactory results.

In certain areas the breeding of woolled sheep on suitable farms is still being experimented with. That there is room for more attention being given to this branch of farming is evident from the fact that during 1924 no less than 14,843 sheep and goats were imported into the Colony, mainly for slaughter purposes.

Pigs.—The price of bacon pigs, though low early in the year, rose to a high figure in the latter part. Bacon factories were kept well supplied, and exports to Johannesburg realised good prices. The quality of the pigs raised has shown a considerable improvement. Experiments conducted at Gwebi demonstrated the advantage of using separated milk and the difficulty of obtaining a suitable substitute for this food in the successful rearing of pigs.

Pig products for 1924 were as follows:—

Bacon and hams	671,829	lbs.
Lard	62,629	lbs.
Sausages	59,553	lbs.
	794,011	lbs.
Increase over 1923 figures	19.3	per cent.

Poultry.—The report of the Poultry Expert indicates that excellent progress has been made in this industry during the year.

The marketing of eggs is now well organised. The requirements of the Congo market are now practically all supplied from this Colony, and a commencement with an overseas export trade has been made. The latter has demonstrated the handicaps from which this trade suffers, viz., high costs of railage and sea freight, the lack of properly equipped trucks for the conveyance of eggs to the coast, and the lack of cold storage facilities in the Colony itself. The latter will shortly be remedied by the erection of the cold storage works, and the other factors will doubtless be dealt with in course of time. Export through Beira has been found impracticable.

The proper preparation of table poultry, by caponising and by correct methods of feeding, has been found to be profitable and is becoming more generally practised.

Egg-laying tests have been continued, the fifth of this series having been started on 1st April and will be concluded on 2nd February, 1925. Results so far have been extremely satisfactory, comparing more than favourably with those in the Union and quite well with those in any other country.

During the year the Southern Rhodesia Egg Circle was formed into a limited liability company, and in spite of lack of capital and other factors, has proved an undoubted success.

Although Southern Rhodesia produces more eggs than are required for local consumption, eggs of poor quality are still being imported from the Union by private firms, mainly for use in confectionery. This class of trade is catered for by the Egg Circle, and no excuse for such importations exists.

Crop Statistics.—The total area of summer crops under cultivation, viz., 286,837 acres, shows an increase of 20,230 acres over last year's figures. Including the area under orchards, afforestation and winter crops, the total of cultivated land may be stated in round numbers as 300,000 acres.

The percentage under maize for grain is 80 per cent., maize for silage occupying 3.9 per cent., tobacco 2.8 per cent., sunflowers 2.2 per cent., ground nuts 2.1 per cent., velvet beans and cotton each 1.4 per cent., beans 1.2 per cent., the balance being made up of fodder grasses, potatoes, pumpkins and other crops.

It is evident that too many farmers still depend upon maize, in spite of the knowledge gained as to the success of several other important crops which might be profitably grown in addition, notably ground nuts and sunflowers.

Returns received by the Statistician show that the total number of farmers has increased by 104 to 2,403.

Maize.—The area planted to maize totalled 231,638 acres, or approximately 10,000 acres more than the figure for the previous year. The actual yield was greater than anticipated, amounting to 1,080,084 bags, but the average yield, owing to the drought, was only 4.66 bags to the acre, as compared with 6.81 in 1922-23, and is one of the lowest on record.

A total of over 400,000 bags of grain and meal have already been graded for export up to the end of December. The methods of grading found satisfactory last year have been continued, but a feature of this year's work has been the number of small parcels to be graded for small shippers other than the Farmers' Co-op., Limited.

Agricultural Experiments.—Four small experiment stations, under the control of the Chief Agriculturist, have been maintained during the year, namely, those at Salisbury, Bulawayo, Gwelo and Gatooma, the three latter in co-operation with the municipal authorities of those towns, to whom a small annual grant-in-aid is made by the Government. At all these, but especially at the Bulawayo and Gwelo stations, which have been longer established, very useful work is being accomplished. At the station at Salisbury, information on a wide variety of subjects of far-reaching importance is being accumulated, and a large number of new crops and new varieties of established crops have been introduced from other countries, numerous parcels of seed from the experiment station being despatched in exchange. Reports on the work of these stations have annually appeared in the *Agricultural Journal.*

In addition, a measure of experimental work has been continued at the Gwebi Farm, where, however, a change of Government policy has placed the farm more on a commercial basis, and in future greater attention will be given to demonstration as distinct from experimental work. Crop rotation and pasture land experiments will be continued, but less prominence will be given to other crop investigations and to feeding experiments with live stock.

Owing to the absence of one of the Agriculturists on duty at Wembley, the extension work of the branch was curtailed and fewer privately owned farms than usual were visited. In all, 179 farmers were visited on their own farms—103 in Mashonaland and 76 in Matabeleland.

Cotton.—As a result of the large area placed under cotton in Southern Rhodesia for the 1924-25 season, the attention of both the Empire Cotton Growing Corporation and the British Cotton Growing Association has been directed to the development of this industry in the Colony. The interest of these two influential bodies has taken practical shape in an arrangement to finance the erection of ginneries at certain centres on a co-operative basis in conjunction with the Government of

this Colony. Another concrete result was the seconding by the corporation of Mr. G. S. Cameron, cotton specialist, for work in this Colony.

The experimental crop of nearly 4,000 acres planted in various parts of the Colony last year resulted in a yield of approximately 1,350 bales of lint, which gave an average yield of about 145 lbs. of lint per acre. A considerable proportion of the acreage shown above was planted in unsuitable areas, which largely explains the low average yield for the whole of the Colony. In favourable areas a yield of up to 1,500 lbs. of seed cotton per acre was obtained in certain instances. There were in all 305 growers of this crop.

The opening of the Central Ginnery in Salisbury on 3rd June last marked the beginning of a new era in the agricultural development of Southern Rhodesia, and enables the crop produced to be dealt with. The cotton here treated sold in Liverpool at 200 to 395 points "on" American middling, *i.e.*, at a premium of from 2d. to 4d. per lb.

During the present season it is estimated that a total of about 75,000 acres has been planted to cotton, spread over practically every district in the country. It is feared that some districts will inevitably prove unsuitable, and the Cotton Expert is of the opinion that this season will prove that cotton can only be produced at a profit in certain areas of several districts.

In conjunction with the Municipality of Gatooma, certain experiments in connection with cotton production were commenced this year, and will, it is hoped, be continued next year, in order that more definite data may be obtained regarding fertilisers, spacing and varieties, and also with regard to commercial plots.

Tobacco.—At the request of the Government of Nyasaland, Mr. Taylor, Tobacco and Cotton Expert, paid a brief visit to that territory in April, and, in addition to being of some assistance there, it is hoped that the information collected will be of value to tobacco growers in this Colony.

Mr. Taylor spent a considerable portion of the year in England, and was able to get into personal touch with tobacco manufacturers and brokers. As a result, it has been ascertained that our tobacco is already in demand in Great Britain for blending with supplies from other sources, and that there is room for a very great expansion of the industry in this Colony in order that a greater output of suitable leaf may be assured. Growers even now are not dependent upon the South African market, and as our production increases greater interest will be taken in it by buyers in England.

The area planted to Virginia and Turkish tobacco last season was 8,003 acres, a reduction compared with the previous year, but the yield was 3,878,460 lbs., the heaviest so far recorded in this Colony. The average for both Virginia and Turkish showed a marked increase, compared with previous years, being 489 lbs. and 451 lbs. per acre respectively. The total number of farmers growing tobacco is shown as 189, of whom 166 are producing Virginia and 23 Turkish.

Towards the end of the year a Government Tobacco Experiment Station was established on the Salisbury Commonage as the result of negotiations between the Government and the Town Council. Here various experiments will be carried out, which it is hoped will prove of practical value to tobacco growers throughout the Colony.

Citrus.—There has been a slight increase in the total number of citrus trees in the Colony during the year, but the actual number of persons growing this fruit for export is still small. The expansion of the export trade has not been quite so rapid as was anticipated, the total number of boxes of oranges despatched being 54,949, compared with 44,760 in the previous year. For the coming season, however, it is estimated that this number will be very largely exceeded. The fruit has been arriving in England in good condition and has created a favourable impression; and, since consignments arrive at a time when oranges from other producing countries are out of season, Rhodesian oranges should in any case command a satisfactory price.

Mr. A. G. Turner, the Citrus Adviser, attended the British Empire Exhibition at Wembley on behalf jointly of this Government and the Fruit Growers' Co-operative Exchange of South Africa, Limited, and also spent a considerable amount of time in visiting the principal distributing centres and interviewing agents interested in the sale of Rhodesian oranges.

Since his return Mr. Turner has resigned his appointment with the Government, in order to take up the management of the London office of the Fruit Growers' Co-operative Exchange. So far no successor has been appointed.

Forestry.—The interest taken in tree-planting and the demand for trees and plants throughout the Colony continue to increase, but the climatic conditions last season were unfavourable to the establishment of the trees planted out.

Two Government nurseries for the raising of young trees and plants for sale are now maintained, one in Salisbury and the other at Fairfield (Mtao Forest Reserve) near Umvuma. At the latter are also raised all the seedlings and transplants needed for planting in the Forest Reserve. The latter property, which comprises over 13,000 acres, is being developed on scientific lines and should in course of time become of great national value. Existing plantations of exotics there now cover 193 acres, whilst those at the Salisbury Forest Nursery remain as at the end of last year, viz., 35 acres. Sales from the Salisbury Nursery for the year amounted to £1,062.

The time of the Forest Officer is largely taken up in furnishing advice to farmers and others interested in tree-planting, in lecturing to farmers' associations, and in inspections of Crown lands on which information is desired as to available timber areas.

During the year the Railway Company undertook an important step in the inauguration of an afforestation scheme on their strips adjoining the line in various parts of the Colony.

Botany and Mycology.—Most of the Botanist's time was spent in identifying diseases of plants sent in by farmers, and in giving advice as to their treatment Tobacco, citrus and cotton diseases made up 57 per cent. of all crop diseases investigated. Very few diseases of maize and cereals were reported. Attention to general economic botany was given so far as time permitted.

Irrigation.—The services of the Irrigation Engineer and his two assistants have been greatly in demand during the year for assistance and advice in connection with water supplies, which, owing to abnormally dry conditions, have given cause for anxiety.

It is satisfactory to be able to refer to several important irrigation schemes which are either completed or under construction, the largest being the following :—Ceres Scheme, Shamva (Mr. A. R. Morkel), Old Umtali Irrigation Scheme, Umtali River Irrigation Scheme, and the Triangle Ranch Scheme in the Ndanga district. The total area brought under irrigation by the completed schemes is 3,000 acres.

In conjunction with the hydrographic branch, the Irrigation Engineer was during this year entrusted with the responsibility of investigating and reporting on a new water supply scheme for Salisbury, the estimated cost of which is £120,000. In addition, investigations were made and advice given upon the water supplies at various Government establishments throughout the Colony.

A considerable portion of the time of this branch has been devoted to development of water boring, well sinking, etc., in Semokwe, Gwanda, Shangani and Insiza Native Reserves. Attention has been given to the prevention of erosion on cultivated lands, with satisfactory results where the advice given has been acted upon. It is not possible with the existing staff to undertake investigations as to the irrigable possibilities in the more remote and unoccupied parts of the Colony, though the importance of this work is fully recognised.

Chemistry.—The normal duties of this branch cover a very wide field, and the extent to which the services of its officers are availed of by the farming community indicates an appreciation of the benefits to be obtained by scientific investigation of their problems. In all, 295 routine samples were received and analysed during the year, comprising the following :—Soils 113, manure and fertilisers 9, cattle dipping fluids 19, toxicological analyses 62, vegetable products 50, waters 9, rocks and minerals 18, unclassified 15.

Experiments in soil treatment and manuring for maize production have been continued, as also the citrus manurial trials commenced last year. A distinct advance is being made in the management of land for permanent agriculture in this Colony, and more attention is being paid to the maintenance of the fertility of arable land by the use of farm manure, green manuring and the use of fertilisers. The work accomplished by the Agricultural Department and by the more progressive farmers has now carried the use of manure and fertilisers for maize and general crop production beyond the experimental stage. Doubtless there is still much room for further improvement in our methods, and the new series of trials above referred to should provide valuable data to that end.

An important investigation into the feeding value, in respect of composition, of silages prepared from various Rhodesian-grown crops has been continued, and so far 28 of such samples have been analysed. Pot experiments and laboratory investigations upon various soils—the soils of the Great Dyke in particular—have been continued, and assistance has been rendered to other Departments upon the chemical aspects of certain research work in hand. Other investigative work carried out included the effect of storage at room temperature upon the maturity of oranges, the analysis of soils, and the determination of cyanogenetic glucosides in vegetable products.

During the year a brochure was prepared dealing with the composition and nutritive values of farm foods commonly grown in Rhodesia, and with the framing of rations for farm stock; this should prove to be a valuable compendium of reference to stock farmers.

Meteorology.—The activities of this branch comprise the collection, classification and publication of meteorological data, the scientific investigation of Rhodesian weather conditions and the issue of forecasts.

There are 427 rainfall stations, 33 third order and 11 second order meteorological stations under the control of this branch. There are also 2 first order meteorological stations with automatic instruments at Salisbury and Bulawayo. The data obtained from these stations are published annually as a meteorological report covering the period July to June.

A weather report, containing the leading features of the weather for each month and tabular statements of the rainfall, etc., is published bi-monthly in the *Agricultural Journal* and reprinted as a separate bulletin. Monthly summaries of the daily observations at four second order stations are sent to Kew regularly, for inclusion in an annual publication dealing with the meteorology of the world.

Special publications during the year were articles on the climate of the Colony for the folders and brochures issued at Wembley Exhibition; and also previously unpublished meteorological data and a coloured normal rainfall map for inclusion in the Rhodesian Year Book. Short-period forecasts were issued at noon daily throughout the rainy season and telegraphed to a number of centres.

The seasonal forecast attempted here has not yet achieved any marked measure of success, but the method adopted, which is framed on the Indian model, will undoubtedly yield more exact results as opportunity arises for further prior factors to be included in the general equation. One useful outcome of these investigations is that the mean Rhodesian rainfall (October to March) is now utilised as a prior factor in the Indian seasonal forecast, as the correlation between the two is marked.

Hydrography.—An exact knowledge of the hydrographic conditions of a country is essential for its sound irrigation development.

The run-off conditions from five typical catchments in this country are now under observation, and the data obtained are published in the annual hydrographic report. In addition, a number of third order gauging stations have been established, from which information is available regarding the winter flow of various rivers and their maximum and minimum flood discharges.

During the year 102 applications for water rights were reported on for the information of the Water Court.

A report on the water power resources of this Colony was presented to the World Power Conference held in London during the Wembley Exhibition, at which this Colony was represented by Major Lightfoot, M.C., of the Geological Survey Department.

A branch of the subject which has up to date received little attention is the water duty required by crops in this country. The accumulation of data of this nature, which is very desirable, is, however, practically dependent on the establishment of a Government experimental irrigation farm.

Entomology.—The normal research work of this branch was very much interfered with this year by the necessity for the creation of an organisation to deal effectively with the locust menace, from which this Colony had been practically free since 1907.

The first invasion of locusts occurred near Wankie in February, when considerable numbers crossed from Bechuanaland and deposited

eggs. By April flying swarms began to cross the border, and enormous numbers gradually dispersed practically all over the eastern and southern portions of the Colony. No time was lost in obtaining large stocks of poison and pumps, and in dividing the Colony into districts, each controlled by one local official, the Chief Entomologist being responsible for the whole organisation. As far as possible the services of Police and other Government officials were utilised in the work of destruction, but as the hatchings became more widespread it was necessary to engage outside assistance, and in all no less than 83 Europeans were employed for this purpose. The natives, at first reluctant to damage a potential food supply, and somewhat sceptical as to the efficacy of the methods employed, eventually rendered valuable service.

Locust spray pumps in large numbers were obtained from Johannesburg, and altogether 3,726 of these were issued. Poison was issued to an amount of 21,975 gallons, in addition to some 12 tons of dry arsenite, and exclusive of cattle dip used. In the majority of affected districts the operations were completely successful, and practically no swarms escaped. Great numbers of the insects are reported to have been killed by locust birds and other enemies, whilst parasites and possibly disease accounted for a great many more. In some cases, however, the hoppers reached maturity and migrated in the direction of Bechuanaland.

Much valuable knowledge has been acquired as to methods of combating this pest, which will be applied should the Colony be unfortunate enough to suffer another invasion.

An advance has been made with the study of pests of maize, citrus and other crops, whilst some general notes have been recorded in respect of pests of cotton.

In connection with tsetse fly, an attempt was made to map carefully the limits of the infested area in the Lomagundi district, with a view to ascertaining the results of the operations against game in the area between the Angwa River and the Umvukwe Hills.

An experiment, carried out in collaboration with the Veterinary Department, with the object of testing the danger of mingling susceptible cattle with fly-struck animals in the absence of tsetse fly, gave positive results, and it is proposed to continue the investigations.

The administrative work of the branch included the inspection at the various ports of entry of 5,025 consignments of plants, and the inspection of nurseries, of which 18 were registered.

British Empire Exhibition.—Southern Rhodesia's agricultural exhibit at Wembley was mainly furnished from the Agricultural Department's experiment stations, augmented by donations from the Rhodesian Tobacco Warehouse and Export Co. and individual farmers. With the exception of the tobacco exhibit, the material was prepared, packed and despatched by this Department. The preparation of publicity literature in connection with the Colony for use at Wembley was carried out by the Chief Agriculturist, and two members of the staff of the Department were seconded for duty at the exhibition, viz., Mr. Mainwaring, Agriculturist, for ten months, and Mr. Taylor, Tobacco and Cotton Expert, for six months. The Exhibition Commissioner, Sir Bourchier Wrey, Bart., has expressed his appreciation of the valuable services rendered by these officials, whose efforts contributed largely to the success of the Colony's exhibit.

The wide range of agricultural products and the evidences of mineral resources displayed served to illustrate the Colony's remarkable progress and future possibilities. Many enquiries were received from prospective settlers, and it is hoped that the interest thus created will result in an increase in the population of the Colony.

The funds provided by the Government and by public subscription for the purpose of the exhibition were not fully expended, and it is proposed to utilise the surplus in connection with the further exhibit being arranged for 1925.

Dr. Nobbs's Retirement.—Mention should be made here of the retirement from the Civil Service in June, 1924, of Dr. Eric A. Nobbs, Ph.D., B.Sc., who had so ably filled the position of Director of Agriculture since 1908. To him belongs the credit of building up to its high standard of efficiency the present staff of the Agricultural Department, and for much of the agricultural legislation now on the Statute Book.

BERTRAM WOODS,

For Director of Agriculture.

28th February, 1925.

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Cattle—											
No. of European	341,878	394,856	468,504	532,311	600,447	678,508	772,891	905,040	936,251	993,608	1,006,013 (Estimated)
Native ...	406,180	445,795	491,522	551,632	610,100	652,776	744,402	845,498	864,894	927,343	1,005,277
Total	748,058	840,651	960,026	1,083,943	1,210,547	1,331,284	1,517,293	1,750,538	1,801,145	1,920,951	2,011,290
Total acreage under cultivation as summer crops	183,407	202,946	249,038	229,953	205,439	211,094	237,268	228,000	266,607	286,837	Not available
Maize (European)—											
Acreage... ...	167,012	174,647	203,150	192,148	173,313	173,467	186,246	181,729	220,937	231,638	do
Yield (bags) ...	914,926	680,285	938,130	591,722	889,969	1,120,548	1,220,768	662,636	1,505,580	1,080,084	do
Tobacco—											
Acreage... ...	1,370	1,310	1,995	3,247	4,197	7,504	9,531	10,174	9,054	8,003	do
Yield (lbs.) ...	426,423	637,261	910,684	620,171	1,467,612	2,947,627	3,746,982	3,182,359	2,810,781	3,878,460	do
Butter (lbs.)—											
Farm	151,916	294,568	221,965	204,886	209,439	294,784	244,761	255,104	292,964	338,343	...
Creameries ...	...	...	...	...	...	...	...	...	282,850	554,206	871,714
Total	...	...	...	..	...	...	...	...	575,814	892,549	...
Exports—											
Maize and mealie meal (bags) ...	205,441	363,349	76,390	252,219	216,348	338,144	513,640	365,139	72,120	790,810	407,585
Tobacco (lbs.) ...	2,237,580	1,534,883	1,311,411	705,597	896,701	829,608	1,737,473	2,383,284	2,248,375	3,973,832	...
Cattle	12	7	12,815	13,221	23,672	27,735	37,285	12,408	23,938	34,841	50,770
Butter (lbs.) ...	55,041	48,648	75,319	282,336	106,227	125,225	204,678	421,815	277,700	342,759	520,000